

Title of Invention: Isotopic and diuretic Effect of GLP-1 and GLP-1 agonists

Inventors (please provide full names): See attached Bib sheet

Earliest Priority Date: See attached Bib sheet

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

"For Sequence Searches Only" Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search SEQ ID No: 3 and the method associated with the sequence (claim 35)

10/656093

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DICTIONARY FILE UPDATES: 7 APR 2008 HIGHEST RN 1012704-12-9

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L1 566 S HAEGTFTSDVSSYLEGQAAKEFIAWLKGR/SQSP

FILE 'CAPLUS' ENTERED AT 10:44:40 ON 08 APR 2008
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FILE COVERS 1907 - 8 Apr 2008 VOL 148 ISS 15
FILE LAST UPDATED: 7 Apr 2008 (20080407/ED)

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L1 566 SEA FILE=REGISTRY ABB=ON PLU=ON HAEGTFTSDVSSYLEGQAAKEFIAW
LVKGR/SQSP
L2 584 SEA FILE=CAPLUS ABB=ON PLU=ON L1
L4 59887 SEA FILE=CAPLUS ABB=ON PLU=ON HYPERTENSION+OLD/CT
L5 43 SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND L4
L6 43 SEA FILE=CAPLUS ABB=ON PLU=ON L5 AND THU/RL
L7 10793 SEA FILE=CAPLUS ABB=ON PLU=ON DIURETICS+OLD/CT
L8 2456 SEA FILE=CAPLUS ABB=ON PLU=ON INOTROPICS+OLD/CT
L9 4 SEA FILE=CAPLUS ABB=ON PLU=ON L6 AND (L7 OR L8)

L1 566 SEA FILE=REGISTRY ABB=ON PLU=ON HAEGTFTSDVSSYLEGQAAKEFIAW
LVKGR/SQSP
L2 584 SEA FILE=CAPLUS ABB=ON PLU=ON L1
L4 59887 SEA FILE=CAPLUS ABB=ON PLU=ON HYPERTENSION+OLD/CT
L5 43 SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND L4
L7 10793 SEA FILE=CAPLUS ABB=ON PLU=ON DIURETICS+OLD/CT
L8 2456 SEA FILE=CAPLUS ABB=ON PLU=ON INOTROPICS+OLD/CT
L10 4 SEA FILE=CAPLUS ABB=ON PLU=ON L5 AND (L7 OR L8)

L1 566 SEA FILE=REGISTRY ABB=ON PLU=ON HAEGTFTSDVSSYLEGQAAKEFIAW
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L2 584 SEA FILE=CAPLUS ABB=ON PLU=ON L1
L3 32 SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND (?HYPERTENS? OR
HIGH(1W) (BLOOD OR PRESSURE) OR HBP) (10A) (TREAT? OR THERAP?
OR PREVENT?)
L11 4 SEA FILE=CAPLUS ABB=ON PLU=ON L3 AND (?DIURETIC? OR
(MYOCARDI## OR CARDIAC OR HEART) (3A) (STIMULAT? OR STIMULANT
) OR (CARDIO OR CARDIAC OR HEART) (3A) PROTECT? OR CARDIOPROT
ECT? OR ?CARDIOTONIC?)

L1 566 SEA FILE=REGISTRY ABB=ON PLU=ON HAEGTFTSDVSSYLEGQAAKEFIAW
LVKGR/SQSP
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L12 8 SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND (?DIURETIC? OR
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) OR (CARDIO OR CARDIAC OR HEART) (3A) PROTECT? OR CARDIOPROT
ECT? OR ?CARDIOTONIC?)

L13 9 S L9 OR L10 OR L11 OR L12

L13 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ED Entered STN: 16 Nov 2006

ACCESSION NUMBER: 2006:1205743 CAPLUS Full-text

DOCUMENT NUMBER: 146:8253

TITLE: Preparation of N- and C-terminal modified peptides
as glucagon-like peptide 1 (GLP-1) receptor
agonists and their use for treating diabetes and
other metabolic disorders

INVENTOR(S): Whelan, James; Lumb, Kevin; Clairmont, Kevin

PATENT ASSIGNEE(S): Bayer Pharmaceuticals Corporation, USA

SOURCE: PCT Int. Appl., 104pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006121860	A2	20061116	WO 2006-US17411	20060505
WO 2006121860	A3	20070412		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,			
	CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,			
	GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM,			
	KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG,			

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MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
CA 2607566 A1 20061116 CA 2006-2607566 20060505
EP 1883419 A2 20080206 EP 2006-759154 20060505
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
PRIORITY APPLN. INFO.: US 2005-678723P P 20050506
WO 2006-US17411 W 20060505

OTHER SOURCE(S): MARPAT 146:8253

AB The invention relates to novel N-terminal and C-terminal modifications of peptides that provide suitable derivatization sites to improve their pharmacokinetic properties. Modified peptides of formula Z1-A1-A2-A3-Gly-A5-Phe-Thr-A8-Asp-A10-A11-A12-A13-A14-A15-A16-A17-A18- A19-A20-A21-Phe-A23-A24-A25-A26-A27-A28-A29-A30-A31-A32-A33-A34-A35- A36-A37-A38-A39-A40-Z2 [A1, A2, to A40 = a bond, amino acid residues (defined), pegylated Cys, or Lys modified at Nε with a fatty acid; Z1 = H, acyl groups, e.g., aminobenzoyl, mercaptobenzoyl, CH3(CH2)nCO-; 5-mercaptotonicotinoyl, 2-[(2-mercaptoethyl)amino]nicotinoyl, 2-(2-mercapto-1H-benzimidazol-1-yl)acetyl, pegylated thiols containing acyl groups, etc.; n = 0-22; Z2 = OH, amino groups, e.g., NH(CH2)5CO2H, aminobenzoic acid, 2-carboxypiperidino, etc.] function as agonists of the GLP-1 receptor in vivo. Synthetic examples describe N-terminal modifying compds., which include (2-mercapto-1H-benzimidazol-1-yl)acetic acid, [(1-hexadecyl-1H-benzimidazol-2-yl)sulfanyl]acetic acid and lithium 2-[[1-[2-(tritylthio)ethyl]-1H-imidazol-2-yl]thio]acetate, for attachment to the peptide via solid phase synthesis. The peptides disclosed bind to the GLP-1 receptor present in the plasma membranes isolated from RINm5F cells with IC50 values in the range of 1.4-248 nM. Modified peptides of the invention provide a new therapy for patients with metabolic disorders such as those resulting from decreased endogenous insulin secretion, in particular diabetes or impaired glucose tolerance.

IT 672297-54-0

RL: PRP (Properties); TNU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(amino acid sequence, glucagon-like peptide I derivative; preparation of modified peptides as GLP-1 receptor agonists and their use for treating diabetes and related diseases)

IT 106612-94-6D, 7-37-Glucagon-like peptide I (human), peptides, conjugates

RL: PRP (Properties); TNU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(amino acid sequence; preparation of modified peptides as GLP-1 receptor agonists and their use for treating diabetes and related diseases)

L13 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ED Entered STN: 14 Jul 2006

ACCESSION NUMBER: 2006:681428 CAPLUS Full-text

DOCUMENT NUMBER: 145:96881

TITLE: Use of GLP-1 and agonists thereof to prevent cardiac myocyte apoptosis

INVENTOR(S): Anderson, Christen; Baron, Alain D.

PATENT ASSIGNEE(S): Amylin Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006073890	A2	20060713	WO 2005-US46788	20051222
WO 2006073890	A3	20070125		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005323063	A1	20060713	AU 2005-323063	20051222
CA 2599594	A1	20060713	CA 2005-2599594	20051222
US 20070021336	A1	20070125	US 2005-313763	20051222
EP 1838336	A2	20071003	EP 2005-857195	20051222
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRIORITY APPLN. INFO.:			US 2004-639124P	P 20041224
			WO 2005-US46788	W 20051222

AB The present invention relates generally to the novel use of GLP-1, including analogs, and agonists, to prevent cardiac myocyte apoptosis. The present invention relates to methods for using GLP-1 for the treatment of conditions associated with cardiac myocyte apoptosis. The present invention further relates to improving the efficiency of cardiac myocytes and also to improving cardiac contractility.

IT 87805-34-3, Glucagon-like peptide I (human)
 87805-34-3D, Glucagon-like peptide I (human), analogs
 RL: PAC (Pharmacological activity); THU (Therapeutic use);
 BIOL (Biological study); USES (Uses)
 (use of GLP-1 and agonists thereof to prevent cardiac myocyte apoptosis)

IT 123475-27-4, GLP-1 (7-36)
 RL: PAC (Pharmacological activity); THU (Therapeutic use);
 BIOL (Biological study); USES (Uses)
 (use of GLP-1 and agonists thereof to prevent cardiac myocyte apoptosis in diabetic patients)

L13 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ED Entered STN: 20 Jan 2006

ACCESSION NUMBER: 2006:57548 CAPLUS Full-text

DOCUMENT NUMBER: 144:206120

TITLE: Active metabolite of GLP-1 mediates myocardial glucose uptake and improves left ventricular performance in conscious dogs with dilated cardiomyopathy

AUTHOR(S): Nikolaidis, Lazaros A.; Elahi, Dariush; Shen, You-Tang; Shannon, Richard P.

10/656093

CORPORATE SOURCE: Department of Medicine, Allegheny General
Hospital, Drexel University College of Medicine,
Pittsburgh, PA, USA
SOURCE: American Journal of Physiology (2005), 289(6, Pt.
2), H2401-H2408
CODEN: AJPHAP; ISSN: 0002-9513
PUBLISHER: American Physiological Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors have shown previously that the glucagon-like peptide-1 (GLP-1)-(7-36) amide increases myocardial glucose uptake and improves left ventricular (LV) and systemic hemodynamics in both conscious dogs with pacing-induced dilated cardiomyopathy (DCM) and humans with LV systolic dysfunction after acute myocardial infarction. However, GLP-1-(7-36) is rapidly degraded in the plasma to GLP-1-(9-36) by dipeptidyl peptidase IV (DPP IV), raising the issue of which peptide is the active moiety. By way of methodol., the authors compared the efficacy of a 48-h continuous i.v. infusion of GLP-1-(7-36) (1.5 pmol·kg⁻¹·min⁻¹) to GLP-1-(9-36) (1.5 pmol·kg⁻¹·min⁻¹) in 28 conscious, chronically instrumented dogs with pacing-induced DCM by measuring LV function and transmyocardial substrate uptake under basal and insulin-stimulated conditions using hyperinsulinemic-euglycemic clamps. As a result, dogs with DCM demonstrated myocardial insulin resistance under basal and insulin-stimulated conditions. Both GLP-1-(7-36) and GLP-1-(9-36) significantly reduced (P < 0.01) LV end-diastolic pressure [GLP-1-(7-36), 28±1 to 15±2 mmHg; GLP-1-(9-36), 29±2 to 16±1 mmHg] and significantly increased (P < 0.01) the first derivative of LV pressure [GLP-1-(7-36), 1315±81 to 2195±102 mmHg/s; GLP-1-(9-36), 1336±77 to 2208±68 mmHg] and cardiac output [GLP-1-(7-36), 1.5±0.1 to 1.9±0.1 l/min; GLP-1-(9-36), 2.0±0.1 to 2.4±0.05 l/min], whereas an equivolume infusion of saline had no effect. Both peptides increased myocardial glucose uptake but without a significant increase in plasma insulin. During the GLP-1-(9-36) infusion, negligible active (N-terminal) peptide was measured in the plasma. In conclusion, in DCM, GLP-1-(9-36) mimics the effects of GLP-1-(7-36) in stimulating myocardial glucose uptake and improving LV and systemic hemodynamics through insulinomimetic as opposed to insulinotropic effects. These data suggest that GLP-1-(9-36) amide is an active peptide.

IT 123475-27-4, GLP-1 (7-36)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(active metabolite of GLP-1 mediates myocardial glucose uptake and improves left ventricular performance in conscious dogs with dilated cardiomyopathy)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L13 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ED Entered STN: 01 Dec 2005

ACCESSION NUMBER: 2005:1259630 CAPLUS Full-text

DOCUMENT NUMBER: 144:17183

TITLE: Drug combinations for treating metabolic disorders

INVENTOR(S): Lautt, Wayne W.

PATENT ASSIGNEE(S): Diamedica Inc.ca, Can.

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2005112949      A1      20051201      WO 2005-CA775      20050520
W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
    CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
    GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM,
    KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
    MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
    SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA,
    UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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    NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
    GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2005245240      A1      20051201      AU 2005-245240      20050520
CA 2566873         A1      20051201      CA 2005-2566873    20050520
EP 1758597         A1      20070307      EP 2005-748807    20050520
R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
    IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
CN 1960735         A      20070509      CN 2005-80016223  20050520
JP 2007538015      T      20071227      JP 2007-516916    20050520
IN 2006DN07077     A      20070831      IN 2006-DN7077    20061124
PRIORITY APPLN. INFO.:      US 2004-572486P      P      20040520
                                WO 2005-CA775      W      20050520

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AB The invention provides pharmaceutical compns. comprising: (a) a modulator of hepatic parasympathetic tone, (b) at least one diabetes drug, and (c) a pharmaceutically acceptable carrier. A method for the treatment and/or prevention of insulin resistance, type 2 diabetes, impaired glucose intolerance, and other associated disorders with the above pharmaceutical composition. The invention also provides for a kit comprising the pharmaceutical composition and instructions for its use.

IT 532951-64-7, CJC-1131

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drug combinations for treating metabolic disorders)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ED Entered STN: 07 Jan 2005

ACCESSION NUMBER: 2005:14148 CAPLUS Full-text

DOCUMENT NUMBER: 142:107413

TITLE: Combination therapy for the treatment of dyslipidemia

INVENTOR(S): Erundu, Ngozi E.; Fong, Tung M.; MacNeil, Douglas J.; Van Der Ploeg, Leonardus H. T.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 106 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005000217	A2	20050106	WO 2004-US17120	20040602

10/656093

WO 2005000217 A3 20050407
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW
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PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
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EP 1635813 A2 20060322 EP 2004-753858 20040602
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
US 20060148721 A1 20060706 US 2005-555194 20051101
PRIORITY APPLN. INFO.: US 2003-476387P P 20030606
WO 2004-US17120 W 20040602

OTHER SOURCE(S): MARPAT 142:107413
AB The invention relates to compns. comprising an anti-obesity agent and an anti-dyslipidemic agent useful for the treatment of dyslipidemia, dyslipidemia associated with obesity and dyslipidemia-related disorders. The invention further relates to methods of treating or preventing obesity, and obesity-related disorders, in a subject in need thereof by administering a composition of the present invention. The invention further provides pharmaceutical compns., medicaments, and kits useful in carrying out these methods.
IT 106612-94-6, 7-37-Glucagon-like peptide I (human)
107444-51-9
RL: PAC (Pharmacological activity); THU (Therapeutic use);
BIOL (Biological study); USES (Uses)
(combination therapy for treatment of dyslipidemia)

L13 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 23 Dec 2004
ACCESSION NUMBER: 2004:1124581 CAPLUS Full-text
DOCUMENT NUMBER: 142:69181
TITLE: Combination therapy for the
treatment of hypertension
INVENTOR(S): Fong, Tung M.; Erondy, Ngozi E.; Macneil, Douglas
J.; McIntyre, James H.; Van Der Ploeg, Leonardus
H. T.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110368	A2	20041223	WO 2004-US17090	20040602
WO 2004110368	A3	20060720		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,			

10/656093

MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
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PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
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EP 1635773 A2 20060322 EP 2004-753832 20040602
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,
PL, SK, HR
US 20060160834 A1 20060720 US 2005-559111 20051202
PRIORITY APPLN. INFO.: US 2003-476390P P 20030606
WO 2004-US17090 W 20040602

OTHER SOURCE(S): MARPAT 142:69181

AB The present invention relates to compns. comprising an anti-obesity agent and an anti-hypertensive agent useful for the treatment of hypertension, hypertension associated with obesity, and hypertension-related disorders. The present invention further relates to methods of treating or preventing obesity, and obesity-related disorders, in a subject in need thereof by administering a composition of the present invention. The present invention further provides for pharmaceutical compns., medicaments, and kits useful in carrying out these methods.

IT 106612-94-6, 7-37-Glucagon-like peptide I (human)
107444-51-9

RL: PAC (Pharmacological activity); THU (Therapeutic use);
BIOL (Biological study); USES (Uses)
(combination therapy of hypertension and
hypertension-related disorders using antiobesity agent and
antihypertensive agent and other agents and
antihypertensive agent)

L13 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ED Entered STN: 21 May 2004

ACCESSION NUMBER: 2004:414602 CAPLUS Full-text

DOCUMENT NUMBER: 140:400707

TITLE: Method of treating left ventricular dysfunction

INVENTOR(S): Shannon, Richard P.; Elahi, Dariush

PATENT ASSIGNEE(S): Allegheny-Singer Research Institute, USA

SOURCE: U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040097411	A1	20040520	US 2002-299162	20021119
US 7192922	B2	20070320		
CA 2449540	A1	20040519	CA 2003-2449540	20031117
EP 1421950	A1	20040526	EP 2003-257268	20031118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			US 2002-299162	A 20021119

10/656093

AB A method of treating a patient having heart failure due to LV systolic dysfunction with an LV ejection fraction less than 40%. The method includes the steps of administering to a patient in need thereof, a compound selected from the group consisting of GIP, GIP analogs, GIP derivs. and pharmaceutically-acceptable salts thereof, GLP-1, GLP-1 analogs, GLP-1 derivs. and pharmaceutically-acceptable salts thereof, at a therapeutically effective amount to improve LV function.

IT 107444-51-9, (7-36)Glucagon-like peptide-1 amide
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method of treating left ventricular dysfunction)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ED Entered STN: 03 May 2002

ACCESSION NUMBER: 2002:332051 CAPLUS Full-text

DOCUMENT NUMBER: 136:350560

TITLE: Treatment of hibernating myocardium and diabetic cardiomyopathy with a GLP-1 peptide

INVENTOR(S): Ehlers, Mario

PATENT ASSIGNEE(S): Coolidge, Thomas R., USA

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034285	A2	20020502	WO 2001-US32559	20011022
WO 2002034285	A3	20030515		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2395165	A1	20020502	CA 2001-2395165	20011022
AU 2002014618	A	20020506	AU 2002-14618	20011022
AU 775663	B2	20040812		
US 20020146405	A1	20021010	US 2001-982978	20011022
US 6894024	B2	20050517		
EP 1330261	A2	20030730	EP 2001-983169	20011022
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2004512311	T	20040422	JP 2002-537336	20011022
ZA 2002004949	A	20050316	ZA 2002-4949	20011022
NZ 519752	A	20050429	NZ 2001-519752	20011022
MX 2002PA06118	A	20040823	MX 2002-PA6118	20020619
AU 2004229049	A1	20041209	AU 2004-229049	20041111
AU 2004229049	B2	20071101		
US 20050096276	A1	20050505	US 2004-7938	20041208
PRIORITY APPLN. INFO.:			US 2000-241834P	P 20001020

US 2000-242139P P 20001023

US 2000-245234P P 20001103

US 2001-982978 A3 20011022

WO 2001-US32559 W 20011022

AB Hibernating myocardium is characterized by viable myocardium with impaired function due to localized reduced perfusion. Hibernating myocytes retain cellular integrity, but cannot sustain high-energy requirements of contraction. High plasma levels of catecholamines, such as norepinephrine, are believed to be predictive of mortality from hibernating myocardium. Likewise, high levels of catecholamines lead to cardiomyopathy in patients with diabetes. GLP-1 reduces plasma norepinephrine levels, and it thus is useful in a method of treating hibernating myocardium or diabetic cardiomyopathy.

IT 123475-27-4

RL: PRP (Properties)

(unclaimed sequence; treatment of hibernating myocardium and diabetic cardiomyopathy with a GLP-1 peptide)

L13 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ED Entered STN: 24 Jun 1999

ACCESSION NUMBER: 1999:390390 CAPLUS Full-text

DOCUMENT NUMBER: 131:49468

TITLE: Oral GLP-1 formulations for antidiabetic and other therapeutic applications

INVENTOR(S): Hoffmann, James Arthur

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9929336	A1	19990617	WO 1998-US25515	19981202
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2312190	A1	19990617	CA 1998-2312190	19981202
AU 9916173	A	19990628	AU 1999-16173	19981202
EP 1049486	A1	20001108	EP 1998-960617	19981202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
JP 2001525371	T	20011211	JP 2000-524005	19981202
US 6358924	B1	20020319	US 2000-585181	20000601
US 20020123466	A1	20020905	US 2002-72540	20020208
PRIORITY APPLN. INFO.:			US 1997-67600P	P 19971205

WO 1998-US25515 W 19981202

AB Methods and formulations are presented that provide for (a) the oral absorption of GLP-1 peptides that bind surfactants; and (b) long-term storage of formulations containing these peptides. For example, a GLP-1/DSS complex is administered orally instead of parenterally, which is much more convenient for, and facilitates compliance with diabetic patients and persons with other GLP-1 treated conditions.

IT 106612-94-6 107444-51-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(amino acid sequence; oral GLP-1 formulations for antidiabetic and other therapeutic applications)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

E1 THROUGH E6 ASSIGNED

(FILE 'CAPLUS' ENTERED AT 10:46:07 ON 08 APR 2008)

E ANTIHYPERTENSIVE AGENTS+ALL/CT

E E2+ALL

L16 35244 S E4+OLD

L17 38 S L2 AND L16

L18 38 S L17 AND THU/RL

L19 3 S (L17 OR L18) AND (L7 OR L8)

L20 0 S L19 NOT L13

(FILE 'REGISTRY' ENTERED AT 10:45:08 ON 08 APR 2008)

L1 566 SEA FILE=REGISTRY ABB=ON PLU=ON HAEGTFTSDVSSYLEGQAAKEFIAW
LVKGR/SQSP

L14 6 SEA FILE=REGISTRY ABB=ON PLU=ON (106612-94-6/BI OR
107444-51-9/BI OR 123475-27-4/BI OR 87805-34-3/BI OR
532951-64-7/BI OR 672297-54-0/BI)

L15 6 SEA FILE=REGISTRY ABB=ON PLU=ON L1 AND L14

L15 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN

RN 672297-54-0 REGISTRY

CN L-Cysteine, L-histidyl-L-alanyl-L- α -glutamylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-valyl-L-seryl-L-seryl-L-tyrosyl-L-leucyl-L- α -glutamylglycyl-L-glutaminy-L-alanyl-L-alanyl-L-lysyl-L- α -glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-L-lysylglycyl-L-arginylglycyl-
(CA INDEX NAME)

OTHER NAMES:

CN 31: PN: WO2006121860 SEQID: 31 claimed sequence

CN 74: PN: WO2004022004 SEQID: 27 claimed sequence

CN 81: PN: WO2004022004 SEQID: 27 claimed sequence

SQL 32

SEQ 1 HAEGTFTSDV SSYLEGQAAK EFIAWLVKGR GC

=====

HITS AT: 1-30

REFERENCE 1: 146:274625

REFERENCE 2: 146:8253

REFERENCE 3: 140:264513

L15 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN

RN ~~532951-64-7~~ REGISTRY

CN L-Lysinamide, L-histidyl-D-alanyl-L- α -glutamylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-valyl-L-seryl-L-seryl-L-tyrosyl-L-leucyl-L- α -glutamylglycyl-L-glutaminyl-L-alanyl-L-alanyl-L-lysyl-L- α -glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-L-lysylglycyl-L-arginyl-N6-[[2-[2-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]amino]ethoxy]ethoxy]acetyl]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN CJC 1131

CI MAN

SQL 31

SEQ 1 HAEGTFTSDV SSYLEGQAAK EFIAWLVKGR K

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HITS AT: 1-30

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 148:198622

REFERENCE 2: 147:480395

REFERENCE 3: 147:336599

REFERENCE 4: 147:181546

REFERENCE 5: 147:125827

REFERENCE 6: 146:507686

REFERENCE 7: 146:309868

REFERENCE 8: 146:135619

REFERENCE 9: 145:443920

REFERENCE 10: 145:328394

L15 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN

RN ~~123475-27-4~~ REGISTRY

CN L-Arginine, L-histidyl-L-alanyl-L- α -glutamylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-valyl-L-seryl-L-seryl-L-tyrosyl-L-leucyl-L- α -glutamylglycyl-L-glutaminyl-L-alanyl-L-alanyl-L-lysyl-L- α -glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-L-lysylglycyl- (CA INDEX NAME)

OTHER NAMES:

CN 10: PN: WO0066142 SEQID: 4 unclaimed sequence

CN 10: PN: WO0248183 SEQID: 8 unclaimed sequence

CN 11: PN: WO2006096515 SEQID: 4 unclaimed sequence

CN 11: PN: WO2007133778 TABLE: 1 unclaimed sequence

CN 12: PN: US6284725 SEQID: 4 unclaimed protein

CN 12: PN: WO0066138 PAGE: 11 unclaimed protein

CN 136: PN: WO2006074600 SEQID: 1 unclaimed sequence

CN 13: PN: WO2004111078 SEQID: 64 unclaimed protein

10/656093

CN 14: PN: WO2004019872 SEQID: 14 unclaimed protein
CN 166: PN: WO0069900 SEQID: 344 unclaimed sequence
CN 171: PN: US20040253242 SEQID: 174 claimed protein
CN 173: PN: WO2004005342 PAGE: 46 claimed protein
CN 174: PN: WO2008004992 SEQID: 22 unclaimed sequence
CN 177: PN: WO0069900 SEQID: 355 unclaimed sequence
CN 17: PN: WO2004022004 SEQID: 1 claimed protein
CN 17: PN: WO2008022716 SEQID: 19 unclaimed sequence
CN 19: PN: WO2007062531 SEQID: 19 unclaimed sequence
CN 1: PN: CA2389462 PAGE: 7 unclaimed protein
CN 1: PN: CN1363654 SEQID: 6 unclaimed protein
CN 1: PN: CN1786031 SEQID: 1 claimed sequence
CN 1: PN: US20040146985 SEQID: 1 claimed protein
CN 1: PN: WO0234285 SEQID: 4 unclaimed sequence
CN 1: PN: WO03011892 SEQID: 1 claimed protein
CN 1: PN: WO03099847 SEQID: 1 claimed protein
CN 1: PN: WO2004056313 SEQID: 35 unclaimed protein
CN 1: PN: WO2007016764 SEQID: 1 claimed sequence
CN 1: PN: WO2007017892 SEQID: 1 unclaimed sequence
CN 201: PN: US20040266678 SEQID: 4 unclaimed protein
CN 236: PN: WO2006059106 SEQID: 159 claimed protein
CN 24: PN: WO0009666 SEQID: 1 unclaimed protein
CN 24: PN: WO2008028117 SEQID: 79 unclaimed sequence
CN 25: PN: US20050107318 SEQID: 25 unclaimed protein
CN 25: PN: US20070184530 SEQID: 25 unclaimed sequence
CN 27: PN: US20060019347 SEQID: 1 claimed protein
CN 28: PN: WO03014318 SEQID: 25 claimed protein
CN 2: PN: CN1927888 SEQID: 2 claimed sequence
CN 2: PN: US20040002442 SEQID: 2 unclaimed protein
CN 2: PN: US20040146985 SEQID: 2 claimed protein
CN 2: PN: US20050043237 SEQID: 3 unclaimed protein
CN 2: PN: WO0028067 PAGE: 14 unclaimed protein
CN 2: PN: WO2004093823 SEQID: 2 claimed protein
CN 2: PN: WO2007018619 SEQID: 2 claimed sequence
CN 31: PN: WO03100021 SEQID: 31 unclaimed sequence
CN 31: PN: WO2008005527 SEQID: 3 claimed sequence
CN 32: PN: WO03071268 PAGE: 28 unclaimed protein
CN 358: PN: US6903186 SEQID: 1 unclaimed protein
CN 395: PN: US20070293429 SEQID: 67 unclaimed sequence
CN 3: PN: US20050143303 SEQID: 3 claimed protein
CN 3: PN: US20060084604 SEQID: 7 claimed protein
CN 3: PN: US6858576 SEQID: 3 unclaimed protein
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY
SQL 30

SEQ 1 HAEGTFTSDV SSYLEGQAAK EFWLVLKGR
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HITS AT: 1-30

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 148:306450
REFERENCE 2: 148:299846
REFERENCE 3: 148:283069
REFERENCE 4: 148:142855

REFERENCE 5: 148:113271
 REFERENCE 6: 148:100902
 REFERENCE 7: 148:85694
 REFERENCE 8: 148:70630
 REFERENCE 9: 148:1612
 REFERENCE 10: 147:491615

L15 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN

RN 107444-51-9 REGISTRY

CN L-Argininamide, L-histidyl-L-alanyl-L- α -glutamylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-valyl-L-seryl-L-seryl-L-tyrosyl-L-leucyl-L- α -glutamylglycyl-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- α -glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-L-lysylglycyl- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glucagon-related peptide 1 (Rana catesbeiana), 3-L-glutamic acid-10-L-valine-16-glycine-17-L-glutamine-23-L-isoleucine-24-L-alanine-27-L-valine-30-L-argininamide-31-de-L-proline-32-de-L-lysine-

OTHER NAMES:

CN (7-36)Glucagon-like peptide-1 amide
 CN (7-36)Glucagon-like peptide-1 amide (human)
 CN 13: PN: WO0041546 FIGURE: 3 claimed protein
 CN 1: PN: WO2007012188 SEQID: 1 claimed sequence
 CN 20: PN: WO2004069314 PAGE: 21 claimed protein
 CN 23: PN: WO2007028394 SEQID: 4 claimed protein
 CN 36: PN: WO0155213 SEQID: 36 claimed sequence
 CN 5: PN: WO2006002532 SEQID: 6 unclaimed protein
 CN 6: PN: WO2004005342 PAGE: 46 claimed protein
 CN 7-36-Human glucagon-like peptide I amide
 CN 774: PN: WO2004074315 SEQID: 775 claimed protein
 CN Glucagon-like peptide-I(7-36) amide
 CN Human GLP-1-(7-36)-amide
 CN Human glucagon-like peptide-1-(7-36) amide
 CN Insulinotropin
 CN Insulinotropin (human)
 CN Rat GLP-I(7-36)amide
 CI COM
 SQL 30

SEQ 1 HAEGTFTSDV SSYLEGQAAK EFWALVKGR

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HITS AT: 1-30

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 148:70143
 REFERENCE 2: 148:46405
 REFERENCE 3: 147:515359
 REFERENCE 4: 147:371784

REFERENCE 5: 147:31373
REFERENCE 6: 146:309868
REFERENCE 7: 146:267171
REFERENCE 8: 146:244662
REFERENCE 9: 146:223145
REFERENCE 10: 146:101039

L15 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN
RN ~~106612-94-6~~ REGISTRY
CN 7-37-Glucagon-like peptide I (human) (CA INDEX NAME)
OTHER NAMES:

CN 10: PN: WO03103572 SEQID: 16 unclaimed protein
CN 111: PN: WO0198331 TABLE: 1 claimed protein
CN 116: PN: WO2007124463 SEQID: 1 claimed sequence
CN 11: PN: US6284725 SEQID: 3 unclaimed protein
CN 11: PN: WO0066138 PAGE: 11 unclaimed protein
CN 11: PN: WO0136643 FIGURE: 4 unclaimed protein
CN 137: PN: WO2006074600 SEQID: 2 unclaimed sequence
CN 13: PN: WO2004056313 SEQID: 11 unclaimed sequence
CN 14: PN: WO2005097175 SEQID: 15 claimed protein
CN 15: PN: WO2007076319 SEQID: 15 claimed protein
CN 15: PN: WO2007081302 SEQID: 15 claimed sequence
CN 17: PN: WO0039278 SEQID: 23 unclaimed protein
CN 18: PN: WO2004022004 SEQID: 2 claimed sequence
CN 18: PN: WO2007062531 SEQID: 18 unclaimed sequence
CN 19: PN: WO02072605 SEQID: 19 unclaimed protein
CN 1: PN: CN1982336 SEQID: 1 unclaimed sequence
CN 1: PN: US20060286129 SEQID: 1 claimed sequence
CN 1: PN: WO0155213 SEQID: 1 claimed protein
CN 1: PN: WO03014318 SEQID: 21 claimed protein
CN 1: PN: WO2004093823 SEQID: 1 claimed protein
CN 1: PN: WO2005019262 SEQID: 1 claimed protein
CN 1: PN: WO2005027978 SEQID: 1 unclaimed protein
CN 1: PN: WO2005028516 SEQID: 1 claimed protein
CN 1: PN: WO2006126673 SEQID: 1 claimed protein
CN 1: PN: WO2007049695 SEQID: 2 claimed sequence
CN 207: PN: US20050215475 SEQID: 209 unclaimed protein
CN 21: PN: US20050107318 SEQID: 21 unclaimed protein
CN 229: PN: WO2004005342 PAGE: 46 claimed protein
CN 22: PN: WO2007028394 SEQID: 3 claimed protein
CN 23: PN: CN1919343 PAGE: 23 unclaimed protein
CN 25: PN: WO0009666 SEQID: 2 unclaimed protein
CN 260: PN: WO2006059106 SEQID: 157 claimed protein
CN 26: PN: WO2007028394 SEQID: 7 claimed protein
CN 28: PN: US20060019347 SEQID: 2 claimed protein
CN 2: PN: CN1786031 SEQID: 2 claimed sequence
CN 2: PN: WO0069911 SEQID: 2 claimed protein
CN 2: PN: WO03030946 SEQID: 2 claimed protein
CN 2: PN: WO03078462 SEQID: 2 claimed sequence
CN 2: PN: WO03099847 SEQID: 3 claimed sequence
CN 2: PN: WO2004105781 PAGE: 3 unclaimed protein
CN 2: PN: WO2004105790 PAGE: 3 unclaimed protein
CN 2: PN: WO2005000360 SEQID: 2 unclaimed sequence
CN 2: PN: WO2005000892 SEQID: 9 claimed protein
CN 2: PN: WO2005019261 SEQID: 2 unclaimed sequence

10/656093

CN 2: PN: WO2007061434 SEQID: 2 claimed protein
CN 2: PN: WO2007065156 SEQID: 2 unclaimed sequence
CN 2: PN: WO2007121411 SEQID: 1 unclaimed sequence
CN 2: PN: WO2007128443 SEQID: 1 claimed sequence
CN 2: PN: WO2007146448 SEQID: 2 unclaimed sequence
CN 3-L-Glutamic acid-6-L-phenylalanine-9-L-aspartic acid-12-L-serine-15-L-glutamic acid-16-glycine-21-L-glutamic acid-23-L-isoleucine-24-L-alanine-27-L-valine-28-L-lysine-31-glycineglucagon-related peptide (Oncorhynchus kisutch)
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
CI COM
SQL 31

SEQ 1 HAEGTFTSDV SSYLEGQAAK EFWLWKGR G
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HITS AT: 1-30

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 148:283069

REFERENCE 2: 148:99214

REFERENCE 3: 148:85694

REFERENCE 4: 148:70143

REFERENCE 5: 147:548045

REFERENCE 6: 147:500797

REFERENCE 7: 147:491615

REFERENCE 8: 147:474587

REFERENCE 9: 147:433618

REFERENCE 10: 147:407101

L15 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN

RN 87805-34-3 REGISTRY

CN Glucagon-like peptide I (human) (CA INDEX NAME)

OTHER NAMES:

CN 164: PN: WO0069900 SEQID: 343 unclaimed protein

CN 167: PN: WO2004005342 PAGE: 46 claimed protein

CN 1: PN: WO0066142 SEQID: 1 unclaimed protein

CN 1: PN: WO0069911 SEQID: 1 claimed protein

CN 20: PN: WO2007028394 SEQID: 1 claimed protein

CN 2: PN: DE102004043153 PAGE: 13/17 claimed protein

CN 7: PN: WO2004005342 PAGE: 46 claimed protein

CN 9: PN: US6284725 SEQID: 1 unclaimed protein

CN 9: PN: WO0066138 PAGE: 11 unclaimed protein

CN Glucagon-like peptide I (ox)

CN Glucagon-like peptide I (rat)

CN Glycine, L-histidyl-L- α -aspartyl-L- α -glutamyl-L-phenylalanyl-L- α -glutamyl-L-arginyl-L-histidyl-L-alanyl-L- α -glutamylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-valyl-L-seryl-L-seryl-L-tyrosyl-L-leucyl-L- α -

10/656093

glutamylglycyl-L-glutaminy-L-alanyl-L-alanyl-L-lysyl-L- α -
glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-
valyl-L-lysylglycyl-L-arginyl-

CN Human Glucagon-like peptide 1
CN Rat GLP-I(1-37)
CI MAN
SQL 37

SEQ 1 HDEFERHAEG TFTSDVSSYL EGQAAKEFIA WLVKGRG

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HITS AT: 7-36

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 146:496285

REFERENCE 2: 146:395543

REFERENCE 3: 146:309868

REFERENCE 4: 146:55801

REFERENCE 5: 145:96881

REFERENCE 6: 144:325290

REFERENCE 7: 143:319551

REFERENCE 8: 143:223078

REFERENCE 9: 143:91107

REFERENCE 10: 141:307860

FILE 'MEDLINE' ENTERED AT 10:47:48 ON 08 APR 2008

FILE 'BIOSIS' ENTERED AT 10:47:48 ON 08 APR 2008

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FILE 'EMBASE' ENTERED AT 10:47:48 ON 08 APR 2008

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L21 825 SEA ABB=ON PLU=ON L1
L22 1 SEA ABB=ON PLU=ON L21 AND (?HYPERTENS? OR HIGH(1W) (BLOOD
OR PRESSURE) OR HBP) (10A) (TREAT? OR THERAP? OR PREVENT?)
L23 8 SEA ABB=ON PLU=ON L21 AND (?DIURETIC? OR (MYOCARDI## OR
CARDIAC OR HEART) (3A) (STIMULAT? OR STIMULANT) OR (CARDIO
OR CARDIAC OR HEART) (3A) PROTECT? OR CARDIOPROTECT? OR
?CARDIOTONIC?)
L24 9 SEA ABB=ON PLU=ON L22 OR L23
L25 9 DUP REM L24 (0 DUPLICATES REMOVED)

L25 ANSWER 1 OF 9 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights
reserved on STN

ACCESSION NUMBER: 2007225744 EMBASE Full-text

TITLE: Effects of glucagon-like peptide-1 and long-acting
analogues on cardiovascular and metabolic function.

AUTHOR: Saraceni, Christine; Broderick, Tom L. (correspondence)

CORPORATE SOURCE: Department of Physiology, Midwestern University, 19555
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 SOURCE: Drugs in R and D, (2007) Vol. 8, No. 3, pp. 145-153.
 Refs: 41
 ISSN: 1174-5886 CODEN: DRDDFD
 COUNTRY: New Zealand
 DOCUMENT TYPE: Journal; General Review; (Review)
 FILE SEGMENT: 030 Clinical and Experimental Pharmacology
 037 Drug Literature Index
 038 Adverse Reactions Titles
 039 Pharmacy
 006 Internal Medicine
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 21 Jun 2007
 Last Updated on STN: 21 Jun 2007

AB Although the insulinotropic role of glucagon-like peptide-1 (GLP-1) in type 2 diabetes mellitus has been substantiated, its role in cardioprotection remains largely unknown. To ascertain the role of the cardiovascular actions of GLP-1 in health and disease states necessitates a review of the current evidence as well as ongoing investigation. Of cardiovascular significance, both positive inotropic and chronotropic effects, unmodifiable by β -adrenergic blockers, have been reportedly attributed to GLP-1 actions on the myocardium. However, the potent role of GLP-1 and its analogues in eliciting tachycardic and pressor effects should be of some concern. Aside from its reported insulinotropic activity, GLP-1 impacts the myocardium directly. Highly specific GLP-1 receptors have been identified in the heart and within the central nervous system, particularly in the nucleus tractus solitarius, a neuromodulatory centre of cardiovascular control. The occurrence of GLP-1 receptors in cardiac tissue and autonomic regions of cardiovascular control has stimulated investigation, particularly as these sites may be suitable targets for the pharmacological action of GLP-1 and long-acting analogues. Discordance on the haemodynamic consequences of GLP-1 pharmacotherapy in experimental animals and human patients has been reported in the literature. However, long-term pharmacological doses of GLP-1 have shown prolonged and beneficial actions on cardiovascular homeostasis in the adjuvant treatment of metabolic disease. .COPYRGT. 2007 Adis Data Information BV. All rights reserved.

L25 ANSWER 2 OF 9 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2007123964 EMBASE Full-text
 TITLE: Glucagon-like peptide 1: Continued advances, new targets and expanding promise as a model therapeutic.
 AUTHOR: Aulinger, Benedikt; D'Alessio, David, Dr.
 (correspondence)
 CORPORATE SOURCE: Division of Endocrinology, University of Cincinnati, Cincinnati, OH, United States. dalessd@ucmail.uc.edu
 AUTHOR: D'Alessio, David, Dr. (correspondence)
 CORPORATE SOURCE: Division of Endocrinology, University of Cincinnati, ML 0547, Cincinnati, OH 45267, United States. dalessd@ucmail.uc.edu
 SOURCE: Current Opinion in Endocrinology, Diabetes and Obesity, (Feb 2007) Vol. 14, No. 1, pp. 68-73.
 Refs: 50
 ISSN: 1752-296X
 PUBLISHER IDENT.: 0126602920070200000014
 COUNTRY: United States
 DOCUMENT TYPE: Journal; General Review; (Review)
 FILE SEGMENT: 029 Clinical and Experimental Biochemistry

003 Endocrinology
037 Drug Literature Index

LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 3 Apr 2007
Last Updated on STN: 3 Apr 2007

AB PURPOSE OF REVIEW: This article discusses glucagon-like peptide 1 physiology and its various sites of action beyond the incretin effect and highlights recent findings (2005 and 2006). RECENT FINDINGS: Glucagon-like peptide 1 is a physiological incretin in humans and promotes insulin secretion after nutrient ingestion. It is secreted from intestinal L cells after meals and may be partially responsible for the improved glycemic control and weight loss after bariatric surgery. In vivo, glucagon-like peptide 1 is quickly degraded by dipeptidyl peptidase IV to glucagon-like peptide 1(9-36), which has unclear physiologic activity. Glucagon-like peptide 1 and its specific receptor are also expressed in the brain, and central nervous system. Glucagon-like peptide 1 can reduce food intake, mediate toxic illness responses and control muscle and liver glucose disposal. In the heart, glucagon-like peptide 1 receptor activation improves cardiac hemodynamics in patients following angioplasty and has a beneficial effect on myocardial function in heart failure and postischemic animal models. Finally, glucagon-like peptide 1 augments islet mass and recent studies have identified cellular mechanisms by which glucagon-like peptide 1 receptor signaling affects this process. SUMMARY: Glucagon-like peptide 1 is emerging as a regulatory factor with a broad range of actions related to substrate and energy metabolism. With the recent development of medications based on glucagon-like peptide 1 receptor signaling for diabetes treatment, these new findings suggest the promise of further application of this system for the treatment of other conditions such as obesity and cardiovascular disease. .COPYRGT. 2007 Lippincott Williams & Wilkins, Inc.

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ACCESSION NUMBER: 2006601367 EMBASE Full-text
TITLE: Glucagon-Like Peptide-1 Infusion Improves Left Ventricular Ejection Fraction and Functional Status in Patients With Chronic Heart Failure.
AUTHOR: Sokos, George G.; Nikolaidis, Lazaros A.; Mankad, Sunil; Shannon, Richard P., Dr. (correspondence)
CORPORATE SOURCE: Department of Medicine, Allegheny General Hospital, Pittsburgh, PA, United States.
AUTHOR: Sokos, George G.; Nikolaidis, Lazaros A.; Mankad, Sunil; Shannon, Richard P., Dr. (correspondence)
CORPORATE SOURCE: Drexel University College of Medicine, Philadelphia, PA, United States.
AUTHOR: Elahi, Dariush
CORPORATE SOURCE: Department of Surgery, The Johns Hopkins University School of Medicine, Baltimore, MD, United States.
SOURCE: Journal of Cardiac Failure, (Dec 2006) Vol. 12, No. 9, pp. 694-699.
Refs: 31
ISSN: 1071-9164 E-ISSN: 1532-8414 CODEN: JCFAF9
PUBLISHER IDENT.: S 1071-9164(06)01109-2
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery
003 Endocrinology
037 Drug Literature Index

038 Adverse Reactions Titles
006 Internal Medicine

LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 23 Jan 2007
Last Updated on STN: 6 Sep 2007

AB Background: Insulin resistance is present in the setting of congestive heart failure. Glucagon-like peptide-1 (GLP-1) is a naturally occurring incretin with both insulinotropic and insulinomimetic properties. Methods and Results: We investigated the safety and efficacy of a 5-week infusion of GLP-1 (2.5 pmol/kg/min) added to standard therapy in 12 patients with New York Heart Association class III/IV heart failure and compared the results with those of 9 patients with heart failure on standard therapy alone. Echocardiograms, maximum myocardial ventilation oxygen consumption (VO(2) max), 6-minute walk test, and Minnesota Living with Heart Failure quality of life score (MNQOL) were assessed. Baseline demographics, background therapy, and the degree of left ventricular dysfunction were similar between groups. GLP-1 significantly improved left ventricular ejection fraction ($21 \pm 3\%$ to $27 \pm 3\%$ $P < .01$), VO(2) max ($10.8 \pm .9$ ml/O(2)/min/kg to $13.9 \pm .6$ ml/O(2)/min/kg; $P < .001$), 6-minute walk distance (232 ± 15 m to 286 ± 12 m; $P < .001$) and MNQOL score (64 ± 4 to 44 ± 5 ; $P < .01$). Benefits were seen in both diabetic and non-diabetic patients. There were no significant changes in any of the parameters in the control patients on standard therapy. GLP-1 was well tolerated with minimal episodes of hypoglycemia and gastrointestinal side effects. Conclusion: Chronic infusion of GLP-1 significantly improves left ventricular function, functional status, and quality of life in patients with severe heart failure. .COPYRGT. 2006 Elsevier Inc. All rights reserved.

L25 ANSWER 4 OF 9 MEDLINE on STN
ACCESSION NUMBER: 2005603848 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 16024574
TITLE: Active metabolite of GLP-1 mediates myocardial glucose uptake and improves left ventricular performance in conscious dogs with dilated cardiomyopathy.
AUTHOR: Nikolaidis Lazaros A; Elahi Dariush; Shen You-Tang; Shannon Richard P
CORPORATE SOURCE: Dept. of Medicine, Allegheny General Hospital, 320 E. North Ave., Pittsburgh, PA 15212, USA.
CONTRACT NUMBER: AG-023125 (United States NIA)
DA-10480 (United States NIDA)
SOURCE: American journal of physiology. Heart and circulatory physiology, (2005 Dec) Vol. 289, No. 6, pp. H2401-8. Electronic Publication: 2005-07-15. Journal code: 100901228. ISSN: 0363-6135.
PUB. COUNTRY: United States
DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, N.I.H., EXTRAMURAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200601
ENTRY DATE: Entered STN: 15 Nov 2005
Last Updated on STN: 11 Jan 2006
Entered Medline: 10 Jan 2006

AB We have shown previously that the glucagon-like peptide-1 (GLP-1)-(7-36) amide increases myocardial glucose uptake and improves left ventricular (LV) and systemic hemodynamics in both conscious dogs with pacing-induced dilated cardiomyopathy (DCM) and humans with LV systolic dysfunction after acute myocardial infarction. However, GLP-1-(7-36) is rapidly degraded in the

plasma to GLP-1-(9-36) by dipeptidyl peptidase IV (DPP IV), raising the issue of which peptide is the active moiety. By way of methodology, we compared the efficacy of a 48-h continuous intravenous infusion of GLP-1-(7-36) (1.5 pmol.kg(-1).min(-1)) to GLP-1-(9-36) (1.5 pmol.kg(-1).min(-1)) in 28 conscious, chronically instrumented dogs with pacing-induced DCM by measuring LV function and transmyocardial substrate uptake under basal and insulin-stimulated conditions using hyperinsulinemic-euglycemic clamps. As a result, dogs with DCM demonstrated myocardial insulin resistance under basal and insulin-stimulated conditions. Both GLP-1-(7-36) and GLP-1-(9-36) significantly reduced ($P < 0.01$) LV end-diastolic pressure [GLP-1-(7-36), 28 +/- 1 to 15 +/- 2 mmHg; GLP-1-(9-36), 29 +/- 2 to 16 +/- 1 mmHg] and significantly increased ($P < 0.01$) the first derivative of LV pressure [GLP-1-(7-36), 1,315 +/- 81 to 2,195 +/- 102 mmHg/s; GLP-1-(9-36), 1,336 +/- 77 to 2,208 +/- 68 mmHg] and cardiac output [GLP-1-(7-36), 1.5 +/- 0.1 to 1.9 +/- 0.1 l/min; GLP-1-(9-36), 2.0 +/- 0.1 to 2.4 +/- 0.05 l/min], whereas an equivolume infusion of saline had no effect. Both peptides increased myocardial glucose uptake but without a significant increase in plasma insulin. During the GLP-1-(9-36) infusion, negligible active (NH2-terminal) peptide was measured in the plasma. In conclusion, in DCM, GLP-1-(9-36) mimics the effects of GLP-1-(7-36) in stimulating myocardial glucose uptake and improving LV and systemic hemodynamics through insulinomimetic as opposed to insulinotropic effects. These data suggest that GLP-1-(9-36) amide is an active peptide.

L25 ANSWER 5 OF 9 MEDLINE on STN
 ACCESSION NUMBER: 2004611777 MEDLINE Full-text
 DOCUMENT NUMBER: PubMed ID: 15536516
 TITLE: [Oral diabetes treatment. Which substance is indicated at which time?].
 Orale Diabetestherapie. Welche Substanz ist wann indiziert?.
 AUTHOR: Hamann A; Morcos M; Nawroth P
 CORPORATE SOURCE: Abteilung Innere Medizin I, Universitätsklinikum Heidelberg.. andreas_hamman@med.uni-heidelberg.de
 SOURCE: Der Internist, (2004 Dec) Vol. 45, No. 12, pp. 1356-63.
 Ref: 30
 Journal code: 0264620. ISSN: 0020-9554.
 PUB. COUNTRY: Germany: Germany, Federal Republic of
 DOCUMENT TYPE: (ENGLISH ABSTRACT)
 Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 LANGUAGE: German
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 200503
 ENTRY DATE: Entered STN: 9 Dec 2004
 Last Updated on STN: 9 Mar 2005
 Entered Medline: 8 Mar 2005

AB The prevalence of type 2 diabetes continues to show a clear upward trend in Germany. In earlier days it was considered the "harmless diabetes of old age," but has become increasingly recognized as a disease carrying a high risk of vascular sequelae as well as shortening the diabetic's remaining life expectancy if adequate therapy is not initiated. In addition to correcting hyperglycemia, treatment consists in effective management of concomitant risk factors such as hypertension, dyslipidemia, and adiposity resulting from faulty nutrition and lack of exercise. In the large majority of overweight type 2 diabetics, metformin is the oral antidiabetic agent of first choice provided the patient does not exhibit renal insufficiency, which represents the most important contraindication. This recommendation for monotherapy of overweight type 2 diabetics is supported by an endpoint study. In contrast,

no equivalent evidence is available on any of the possible options for oral combination therapy.

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ACCESSION NUMBER: 2004537018 EMBASE Full-text
 TITLE: Clinical implications: A review of the data.
 AUTHOR: Sack, Michael, Dr. (correspondence)
 CORPORATE SOURCE: Natl. Heart, Lung, and Blood Inst., Molecular Biology
 Section, National Institutes of Health, Bethesda, MD,
 United States. sackm@nhlbi.nih.gov
 AUTHOR: Sack, Michael, Dr. (correspondence)
 CORPORATE SOURCE: Natl. Heart, Lung, and Blood Inst., Molecular Biology
 Section, MSC-1650, 10 Center Drive, Bethesda, MD
 20892-1650, United States. sackm@nhlbi.nih.gov
 SOURCE: Advanced Studies in Medicine, (Nov 2004) Vol. 4, No. 10
 B, pp. S816-S821.
 Refs: 26
 ISSN: 1530-3004 CODEN: ASMDCT
 COUNTRY: United States
 DOCUMENT TYPE: Journal; General Review; (Review)
 FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular
 Surgery
 037 Drug Literature Index
 038 Adverse Reactions Titles
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 6 Jan 2005
 Last Updated on STN: 6 Jan 2005

AB Despite treatment with traditional pharmacotherapy and/or revascularization, angina remains a significant health problem for many patients with ischemic heart disease. Novel agents that manipulate cardiac metabolism in the ischemic state to provide relief from anginal symptoms may prove beneficial to many patients with persistent angina despite traditional treatment. Recent clinical data using novel pharmacologic compounds to optimize metabolism in cardiac ischemia as well as clinical implications of these agents are reviewed. Ranolazine and trimetazidine, 2 orally active partial free fatty acid oxidation inhibitors, have demonstrated angina relief independent of hemodynamic effects as monotherapy or in combination with traditional antianginal medication. Ranolazine is currently under review by the US Food and Drug Administration for approval in the United States. Trimetazidine is approved in more than 80 countries but is not likely to receive approval in the United States until its effects on the QT interval, toxicity at higher doses, and a randomized dose-response study are formally evaluated. Although not practical for chronic administration in the angina patient, beneficial effects of continuous infusion with glucose, insulin, and potassium in patients post acute myocardial infarction (AMI) may provide important insight into the development of new antianginal therapy. Glucagon-like peptide-1 has demonstrated beneficial global and regional ventricular function in a pilot study of patients after successful reperfusion after AMI. The anti-ischemic agent ivabradine is an indirect metabolic modulator and has demonstrated a reduction in major coronary events in patients with stable angina. This cardioprotective benefit observed with ivabradine may be associated with an improvement in fibrinolytic capacity. To date clinical experience with this novel class of agents is limited in the United States. However, controlled clinical studies are encouraging regarding the future use of these agents as a novel strategy for the management of coronary artery disease. Finally, further data are needed to determine if these novel therapies will be able to

fill the gap in angina relief in patients who remain refractory with traditional pharmacotherapy commonly coupled with revascularization.

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ACCESSION NUMBER: 2003226161 EMBASE Full-text
 TITLE: Antihypertensive effect of glucagon-like peptide 1 in Dahl salt-sensitive rats.
 AUTHOR: Yu, Ming; Moreno, Carol; Hoagland, Kimberly M.; Dahly, Annette; Ditter, Katie; Roman, Richard J.
 (correspondence)
 CORPORATE SOURCE: Department of Physiology, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226, United States. rroman@mcw.edu
 AUTHOR: Mistry, Mahesh
 CORPORATE SOURCE: Restoragen Inc., Lincoln, NE, United States.
 SOURCE: Journal of Hypertension, (1 Jun 2003) Vol. 21, No. 6, pp. 1125-1135.
 Refs: 44
 ISSN: 0263-6352 CODEN: JOHYD3
 COUNTRY: United Kingdom
 DOCUMENT TYPE: Journal; Article
 FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery
 028 Urology and Nephrology
 030 Clinical and Experimental Pharmacology
 037 Drug Literature Index
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 19 Jun 2003
 Last Updated on STN: 19 Jun 2003

AB Background: Dahl salt-sensitive (Dahl S) rats exhibit many phenotypic traits associated with salt-sensitive hypertension in man. Specifically, they are salt-sensitive, insulin-resistant and hyperlipidemic. They also develop endothelial dysfunction, cardiac injury and glomerulosclerosis. Insulin resistance is linked to hypertension, renal and cardiac damage and endothelial dysfunction. Thus, an agent that has diuretic action and can improve insulin resistance, like recombinant glucagon-like peptide-1(7-36)amide (rGLP-1), may have an antihypertensive effect. Objective: To determine whether chronic administration of rGLP-1 attenuates the development of hypertension, endothelial dysfunction and/or hypertension-induced renal and cardiac end organ damage in Dahl S rats. Methods: Mean arterial pressure (MAP) and urinary excretion of protein and albumin were measured in Dahl S rats before and after they were fed a 8% NaCl diet and infused with rGLP-1 (1 µg/kg per min, i.v.) or vehicle for 14 days. At the end of the study, the degree of renal and cardiac injury was histologically assessed and endothelium-dependent relaxing function was studied using aortic rings. In other rats, the effects of rGLP-1 on sodium and water balance and plasma glucose and insulin levels for the first 3 days following a step change in sodium intake from a 0.1% NaCl diet to 7.5 mEq/day were determined. Results: rGLP-1 significantly attenuated the development of hypertension in Dahl S rats (136 ± 7 versus 174 ± 6 mmHg). This was associated with reduction in proteinuria (46 ± 7 versus 128 ± 15 mg/day) and albuminuria (46 ± 7 versus 86 ± 18 mg/day) and improvement of endothelial function and renal and cardiac damage. rGLP-1 markedly increased urine flow and sodium excretion for the first 3 days following elevation in sodium intake. It had no significant effects on plasma glucose and insulin concentrations. Conclusion: rGLP-1 has antihypertensive and cardiac and renoprotective effects in Dahl S rats fed a high salt diet. The antihypertensive effect of rGLP-1 in Dahl S rats is due mainly to its diuretic

and natriuretic effects, rather than an effect to improve insulin-resistance.
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L25 ANSWER 8 OF 9 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003279565 EMBASE Full-text
 TITLE: Glucagon-like peptide-1 (7-36) amide prevents the accumulation of pyruvate and lactate in the ischemic and non-ischemic porcine myocardium.
 AUTHOR: Kavianipour, Mohammad
 CORPORATE SOURCE: Dept. of Pub. Hlth./Clin. Medicine, Umea University Hospital, Umea, Sweden.
 AUTHOR: Ehlers, Mario R.
 CORPORATE SOURCE: Restoragen, Inc., Lincoln, NE, United States.
 AUTHOR: Malmberg, Klas; Ryden, Lars
 CORPORATE SOURCE: Department of Cardiology, Karolinska Hospital, Stockholm, Sweden.
 AUTHOR: Ronquist, Gunnar
 CORPORATE SOURCE: Department of Clinical Chemistry, University Hospital, Uppsala, Sweden.
 AUTHOR: Wikstrom, Gerhard (correspondence)
 CORPORATE SOURCE: Department of Cardiology, University Hospital, Akademiska Sjukhuset, Uppsala SE-751 85, Sweden. Gerhard.wikstrom@medsci.se
 AUTHOR: Gutniak, Mark
 CORPORATE SOURCE: Department of Medicine, Sodertsjukhuset, Stockholm, Sweden.
 SOURCE: Peptides, (1 Apr 2003) Vol. 24, No. 4, pp. 569-578.
 Refs: 28
 ISSN: 0196-9781 CODEN: PEPTDO
 COUNTRY: United States
 DOCUMENT TYPE: Journal; Article
 FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery
 030 Clinical and Experimental Pharmacology
 037 Drug Literature Index
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 31 Jul 2003
 Last Updated on STN: 31 Jul 2003

AB Glucagon-like peptide-1 (7-36) amide (GLP-1) has been studied as a treatment option in diabetic patients. We investigated the effect of recombinant GLP-1 infusion on hemodynamic parameters, myocardial metabolism, and infarct size during normoxic conditions as well as during ischemia and reperfusion using an open-chest porcine heart model. In the presence of rGLP-1, interstitial levels of pyruvate and lactate decreased during ischemia and reperfusion both in ischemic and non-ischemic tissue. Moreover, rGLP-1 infusion resulted in increased plasma insulin levels and decreased blood glucose levels. Neither hemodynamic variables nor the consequent infarct size were influenced by rGLP-1 infusion. We conclude that rGLP-1 altered myocardial glucose utilization during ischemia and reperfusion. It did not exert any untoward hemodynamic effects. .COPYRGT. 2003 Elsevier Science Inc. All rights reserved.

L25 ANSWER 9 OF 9 MEDLINE on STN

ACCESSION NUMBER: 2002116165 MEDLINE Full-text
 DOCUMENT NUMBER: PubMed ID: 11779579
 TITLE: Renal effects of glucagon-like peptide in rats.
 AUTHOR: Moreno Carol; Mistry Mahesh; Roman Richard J

10/656093

CORPORATE SOURCE: Department of Physiology, Medical College of Wisconsin,
8701 Watertown Plank Road, PO Box 26509, Milwaukee, WI
53226-0509, USA.

CONTRACT NUMBER: HL36279 (United States NHLBI)
SOURCE: European journal of pharmacology, (2002 Jan 11) Vol.
434, No. 3, pp. 163-7.
Journal code: 1254354. ISSN: 0014-2999.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200204

ENTRY DATE: Entered STN: 20 Feb 2002

Last Updated on STN: 19 Apr 2002

Entered Medline: 18 Apr 2002

AB The present study examined the effects of recombinant glucagon-like peptide-1-(7-36)amide (rGLP-1) on renal hemodynamics and excretory function in innervated and denervated kidneys of anesthetized rats. Intravenous infusion of rGLP-1 at a dose of 1 microg x kg(-1) x min(-1) increased urine flow and Na(+) excretion 13-fold in the innervated kidney. The natriuretic and diuretic response to rGLP-1 was attenuated in the denervated kidney in which urine flow and Na(+) excretion only increased 3-fold. Fractional excretion of Li(+), an index of proximal tubular reabsorption, increased 219% in the innervated kidney but only 54% in the denervated kidney during infusion of rGLP-1. The diuretic and natriuretic response to rGLP-1 was associated with an increase in glomerular filtration rate (39%) in the innervated kidney, but it had no effect on glomerular filtration rate in the denervated kidney. These results indicate that the natriuretic and diuretic effects of rGLP-1 are due to inhibition of Na(+) reabsorption in the proximal tubule. It also increases glomerular filtration rate in kidneys with an intact renal innervation.

FILE 'HOME' ENTERED AT 10:49:08 ON 08 APR 2008

=> d his ful

FILE 'REGISTRY' ENTERED AT 10:30:45 ON 08 APR 2008

L1 566 SEA ABB=ON PLU=ON HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR/SQSP

FILE 'CAPLUS' ENTERED AT 10:31:10 ON 08 APR 2008

L2 584 SEA ABB=ON PLU=ON L1

L3 32 SEA ABB=ON PLU=ON L2 AND (?HYPERTENS? OR HIGH(1W) (BLOOD
OR PRESSURE) OR HBP) (10A) (TREAT? OR THERAP? OR PREVENT?)
SET REN ON

E HYPERTENSION+ALL/CT

L4 59887 SEA ABB=ON PLU=ON HYPERTENSION+OLD/CT

L5 43 SEA ABB=ON PLU=ON L2 AND L4

L6 43 SEA ABB=ON PLU=ON L5 AND THU/RL

E DIURETIC+ALL/CT

E E2+ALL

L7 10793 SEA ABB=ON PLU=ON DIURETICS+OLD/CT

E INOTROPICS+ALL/CT

L8 2456 SEA ABB=ON PLU=ON INOTROPICS+OLD/CT

L9 4 SEA ABB=ON PLU=ON L6 AND (L7 OR L8)

L10 4 SEA ABB=ON PLU=ON L5 AND (L7 OR L8)

L11 4 SEA ABB=ON PLU=ON L3 AND (?DIURETIC? OR (MYOCARDI## OR
CARDIAC OR HEART) (3A) (STIMULAT? OR STIMULANT) OR (CARDIO
OR CARDIAC OR HEART) (3A) PROTECT? OR CARDIOPROTECT? OR
?CARDIOTONIC?)

L12 8 SEA ABB=ON PLU=ON L2 AND (?DIURETIC? OR (MYOCARDI## OR
CARDIAC OR HEART) (3A) (STIMULAT? OR STIMULANT) OR (CARDIO
OR CARDIAC OR HEART) (3A) PROTECT? OR CARDIOPROTECT? OR
?CARDIOTONIC?)

L13 9 SEA ABB=ON PLU=ON L9 OR L10 OR L11 OR L12

D QUE L9

D QUE L10

D QUE L11

D QUE L12

D L13 1-9

SEL HIT L13 1-9 RN

FILE 'REGISTRY' ENTERED AT 10:45:08 ON 08 APR 2008

L14 6 SEA ABB=ON PLU=ON (106612-94-6/BI OR 107444-51-9/BI OR
123475-27-4/BI OR 87805-34-3/BI OR 532951-64-7/BI OR
672297-54-0/BI)

D QUE

L15 6 SEA ABB=ON PLU=ON L1 AND L14

FILE 'CAPLUS' ENTERED AT 10:46:07 ON 08 APR 2008

E ANTIHYPERTENSIVE AGENTS+ALL/CT

E E2+ALL

L16 35244 SEA ABB=ON PLU=ON ANTIHYPERTENSIVES+OLD/CT

L17 38 SEA ABB=ON PLU=ON L2 AND L16

L18 38 SEA ABB=ON PLU=ON L17 AND THU/RL

L19 3 SEA ABB=ON PLU=ON (L17 OR L18) AND (L7 OR L8)

L20 0 SEA ABB=ON PLU=ON L19 NOT L13

FILE 'REGISTRY' ENTERED AT 10:47:17 ON 08 APR 2008

D QUE L15

D L15 1-6

FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 10:47:48 ON 08 APR 2008

L21 825 SEA ABB=ON PLU=ON L1

10/656093

L22 1 SEA ABB=ON PLU=ON L21 AND (?HYPERTENS? OR HIGH(1W) (BLOOD
OR PRESSURE) OR HBP) (10A) (TREAT? OR THERAP? OR PREVENT?)
L23 8 SEA ABB=ON PLU=ON L21 AND (?DIURETIC? OR (MYOCARDI## OR
CARDIAC OR HEART) (3A) (STIMULAT? OR STIMULANT) OR (CARDIO
OR CARDIAC OR HEART) (3A) PROTECT? OR CARDIOPROTECT? OR
?CARDIOTONIC?)
L24 9 SEA ABB=ON PLU=ON L22 OR L23
L25 9 DUP REM L24 (0 DUPLICATES REMOVED)
D 1-9 IBIB ABS

FILE 'HOME' ENTERED AT 10:49:08 ON 08 APR 2008

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10/656093

revised 2008 MeSH terms. See HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

See HELP RANGE before carrying out any RANGE search.

FILE BIOSIS

FILE COVERS 1926 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 2 April 2008 (20080402/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

FILE EMBASE

FILE COVERS 1974 TO 8 Apr 2008 (20080408/ED)

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Beginning January 2008, Elsevier will no longer provide EMTREE codes as part of the EMTREE thesaurus in EMBASE. Please update your current-awareness alerts (SDIs) if they contain EMTREE codes.

For further assistance, please contact your local helpdesk.